

## **REMARKS**

In reply to the Office Action mailed May 13, 2005 Applicant requests entry of the amendments listed above and consideration of the following remarks.

### **Rejections under 35 U.S.C. 103(a)**

The Examiner rejected Claims 1, 8, 10, 12-16, and 20-23 as allegedly rendered obvious by U.S. Patent 5,761,418 to Francis et al. ("Francis") in view of U.S. Patent 6,078,913 to Aoki et al. ("Aoki").

With reference to claims 1, 8, 10, 12 - 16 and 20 -23 the Examiner states that "Francis discloses a method for clustering a plurality of documents comprised of a plurality of clusters (see Fig. 1, clusters A – C), wherein each document includes a plurality of words (col. 7, lines 15 – 16), the method comprising:

- 'Accessing the document collection' See Fig. 2, fig. 15, element 1540, col. 8, lines 13 – 25.
- 'Performing a clustering process that creates a hierarchy of clusters that reflects a segregation of the documents in the collection based on the words included in the documents' [.] See Fig. 1, col. 7, lines 4 – 31. The resources are linked to each other by a path or links. In other words, the first resource links to second, and the second resource can link to third resource by its terms as shown in Fig. 5. The Fig. 5 shows searching branching out within the clusters (col. 13, lines 45 – 51). Clearly, this is a hierarchical structure of the clusters.

- 'Wherein the first and second clusters are associated with different paths of the hierarchy' See Fig. 5.
- 'Storing a representation of the hierarchy of clusters in a memory' See Fig. 15, col. 8, lines 13-25.
- 'Making the representation available to an entity in response to a request associated with the document collection' See Fig. 4, 6, col. 5, lines 42-53." (Office Action at pages 2-3).

Applicants respectfully traverse.

In Francis resources are organized into a non-hierarchical sparsely connected mesh network shown in FIG. 1 (col. 6, lines 59-67 and col. 7, lines 4-7). Moreover, as the Examiner concedes "Francis does not clearly teach that the clusters are associated with different paths of the hierarchy" nor, that "the clusters are associated with different paths of the hierarchy, wherein each document includes a plurality of words and is represented as a set of (document, word) pairs." Additionally, Francis does not disclose the creation or use of any hierarchical data structures to store representations of embodiments of hierarchies of clusters. Indeed, the organization recited in Francis obviates the need for such structures because "if a single resource is known that contains all the desired terms, all such resources can efficiently be found by simply successively traversing the links within the cluster" of terms. (See col. 7, lines 27-29). As stated in Francis, "it is impossible to efficiently navigate all of the Web. Parts of the Web can be effectively navigated, for instance by indexing some part of the Web and placing that index on a single

computer, which can then be locally searched. But this approach **does not scale** to global proportions.” (See col. 2, lines 25-30). Thus, Francis is directed to “distributed topology creation and maintenance,” (See col. 6, line 54) where “a resource does not need to have associated with it any explicit information about what cluster it belongs to, nor does it require such information to exist anywhere ... **This lack of explicit information also contributes to good scaling**, especially in the case where there are a large number of resources, each of which contains a large number of terms or term combinations.” (See col. 9, lines 27-35). Therefore, Francis teaches away from the use of centralized indexing or centralized database methods for searching and/or navigation such as the methods outlined in Aoki, in which “a cluster database storing a cluster of node information elements” in a “tree structure based degree of similarity in all of the documents” is used. (See Aoki, Abstract). Moreover, because Francis (where resource information is distributed and nodes have sparse links to similar resources) and Aoki (where an approximation of a degree of similarity is used to make hard assignments of documents to a cluster that is stored centrally in a cluster database) use radically different approaches to searching and/or navigation, such a combination of the references would neither anticipate nor yield the present invention. Therefore, it would neither be practicable nor obvious for a person of ordinary skill in the art at the time the invention was made to combine their teachings, and the teachings, if combined, would not yield the present invention.

Therefore claims 1, 8, 10, 12 -15, 20, 22-23 are not rendered obvious by the teachings in Francis and Aoki either separately, or in combination.

Claim 16 depends from claim 15 and is not rendered obvious for at least the same reasons.

Claim 21 depends from claim 20 and is not rendered obvious for at least the same reasons.

Therefore, claims 1, 8, 10, 12-16 and 20-23 are pending and under consideration.

The Examiner has also rejected claims 2 - 7, 9, 11, 17-19 under 35 U.S.C. 103(a) as being unpatentable over Francis in view of Aoki further in view of U.S. Patent 6,233,575 to Agrawal ("Agrawal").

Claims 2-7, 9, 11, and 17-19 depend from independent claims 1, 8, 10, and 15 respectively, which, as Applicant has pointed out above, are patentable and not rendered obvious by Francis, or by Aoki either separately, or in combination. Therefore, in view of the fact that Francis and Aoki do not suggest or teach the invention, and that their combination would be impractical and would not yield the present invention, the addition of Agrawal fails to cure the earlier deficiencies. Thus, in view of the patentability of claims 1, 8, 10, and 15 over Francis in view of Aoki, Applicant respectfully submits that claims 2-7, 9, 11, and 17-19 are also patentable over Francis in view of Aoki and further in view of Agrawal.

Applicant respectfully submits that claims 2-7, 9, 11, 17-19 are pending and under consideration.

In light of the foregoing distinctions, the instant claims are not obvious over Francis in view of Aoki and further in view of Agrawal. Applicants thus respectfully request that these rejections be withdrawn.

**Conclusion**

As a result of this Amendment, claims 1-23 are currently pending. The following remarks are submitted to be fully responsive to the Office Action. Reconsideration of this application in light of these remarks and allowance of this application is respectfully requested.

In view of the foregoing amendments and remarks, Applicant respectfully requests reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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